TARGET
CELL
SAM-COATED (NON-FOULING) ELECTRODE

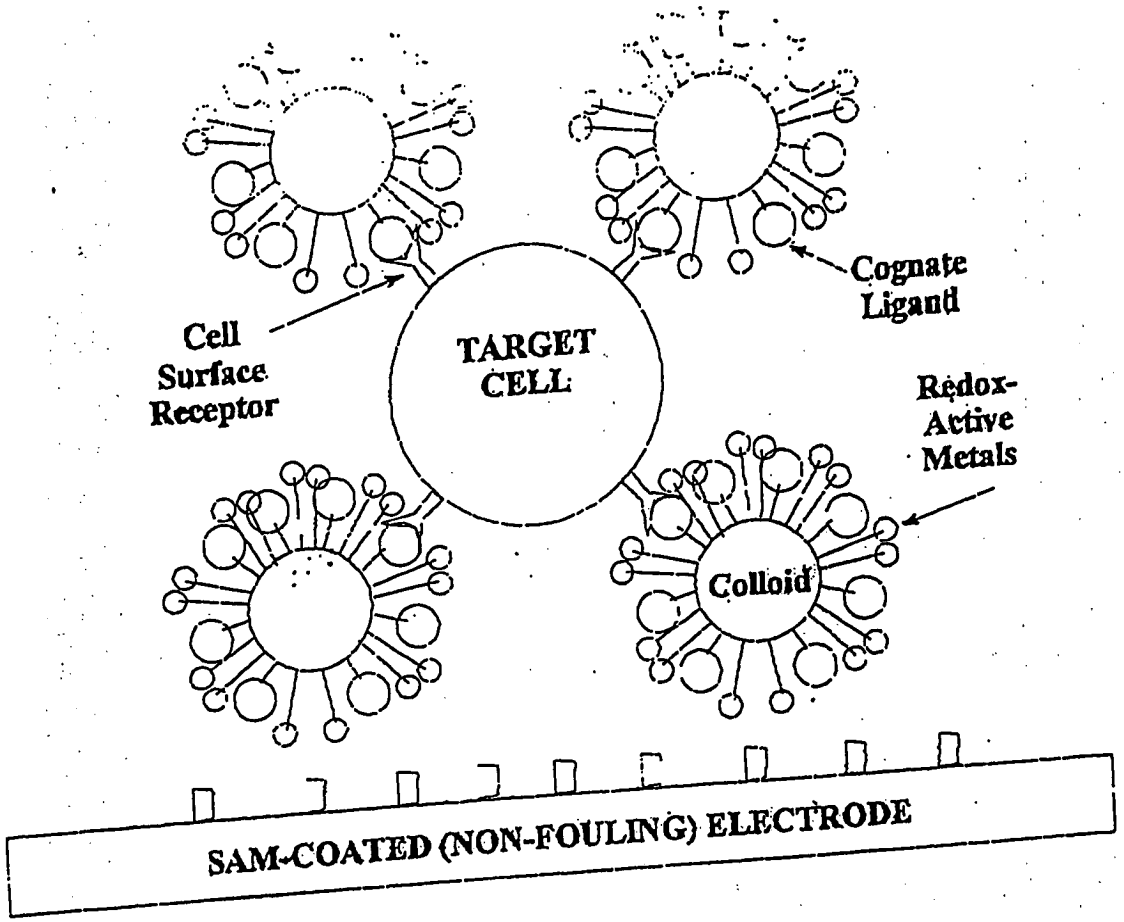


Figure 3

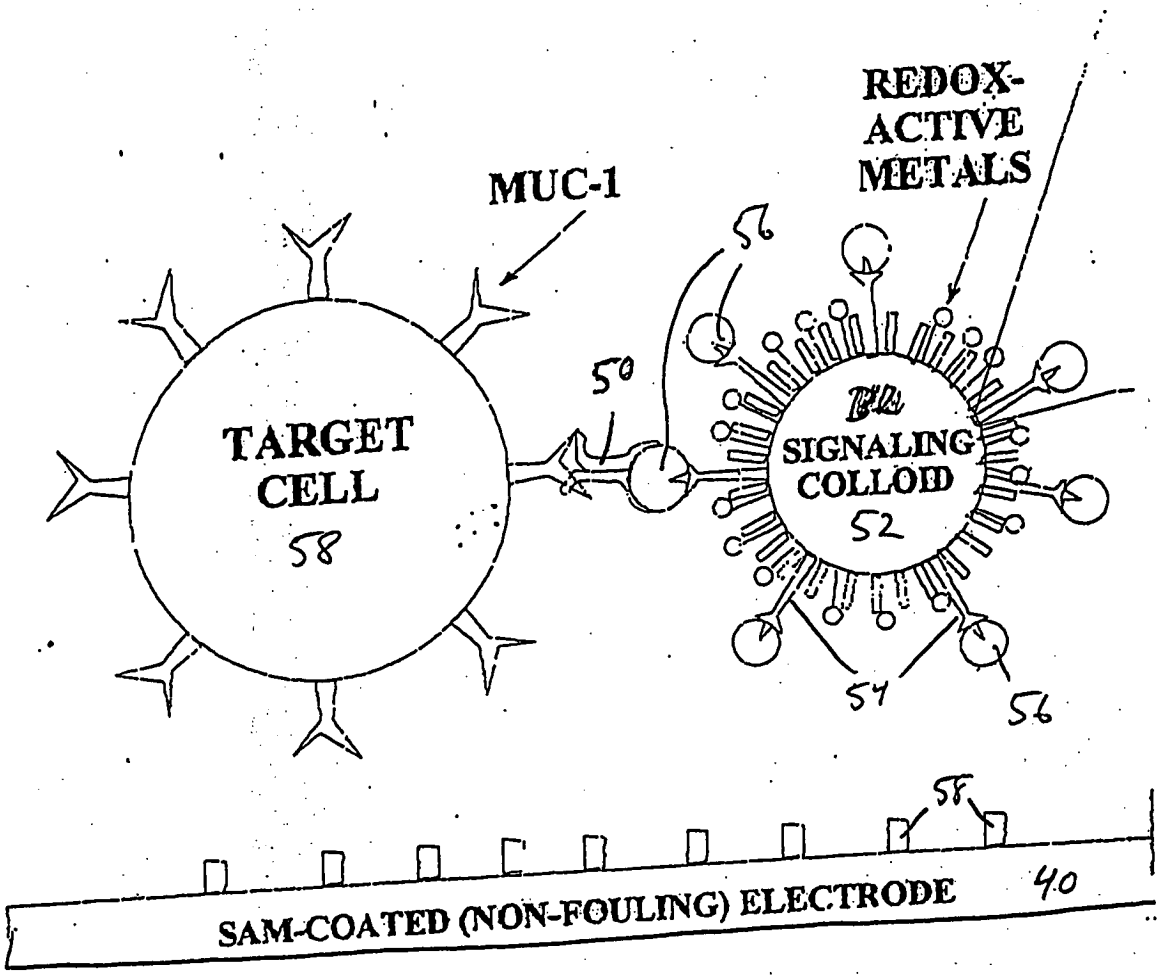


Figure 4

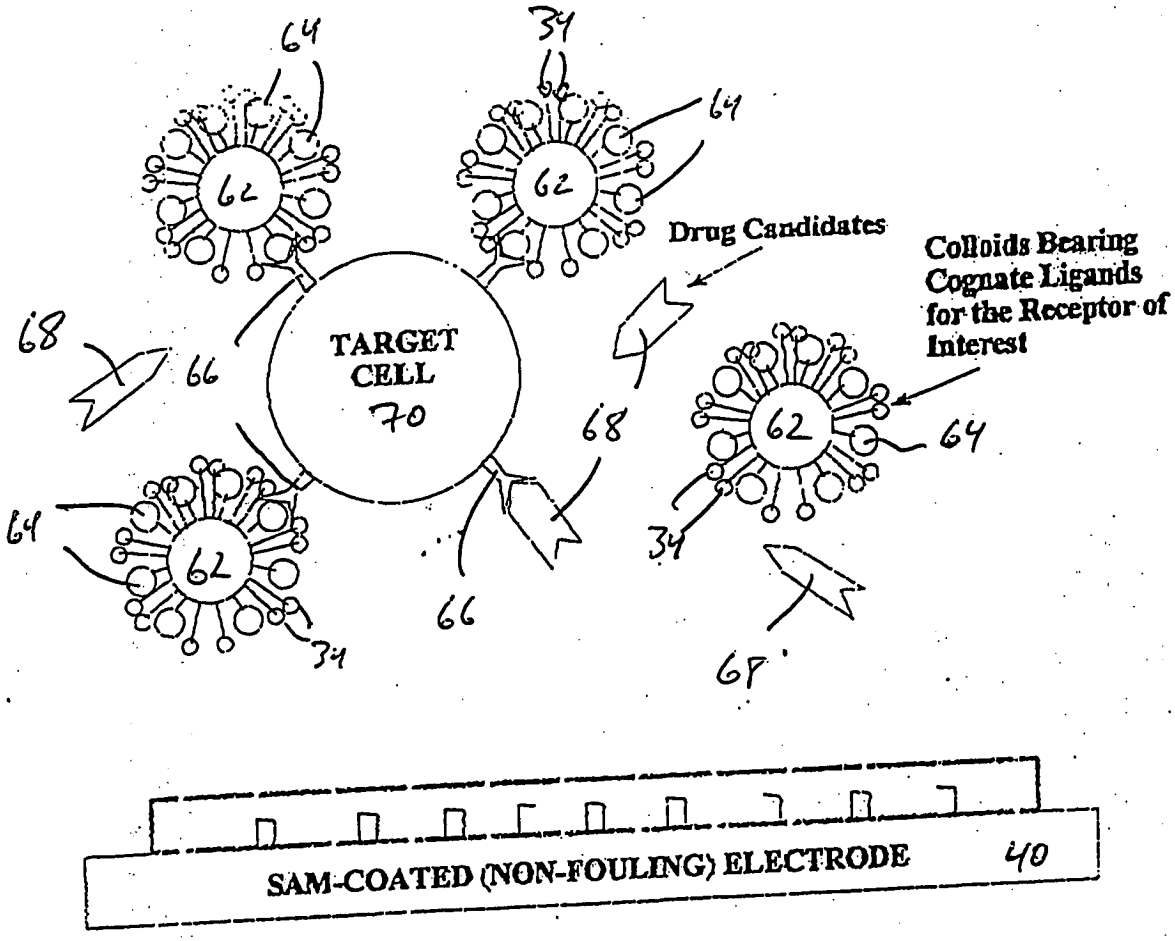


Figure 5

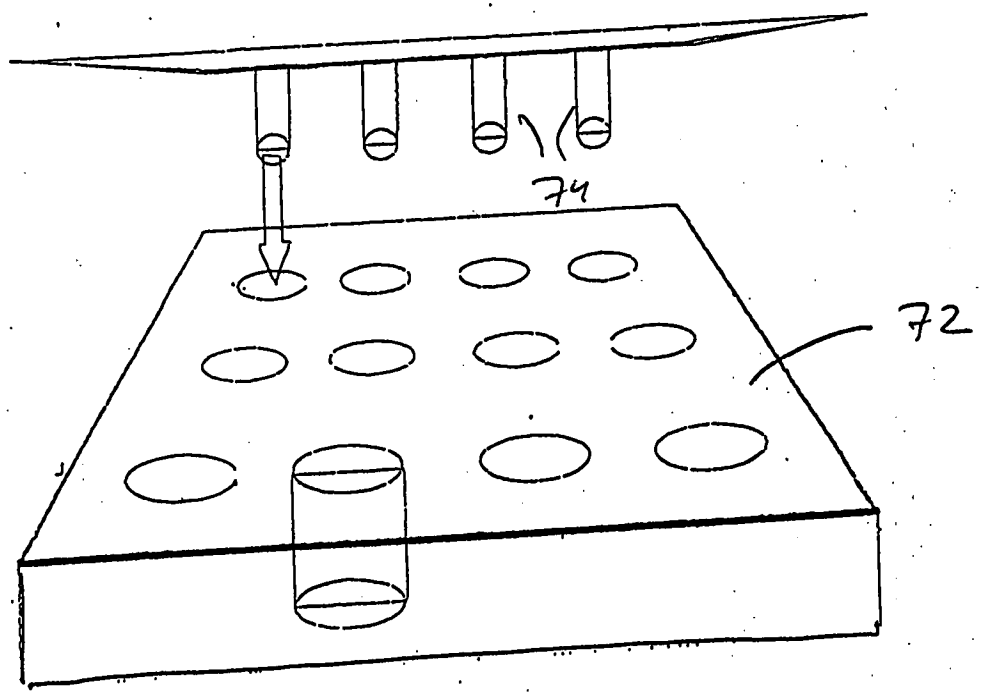


Figure 6

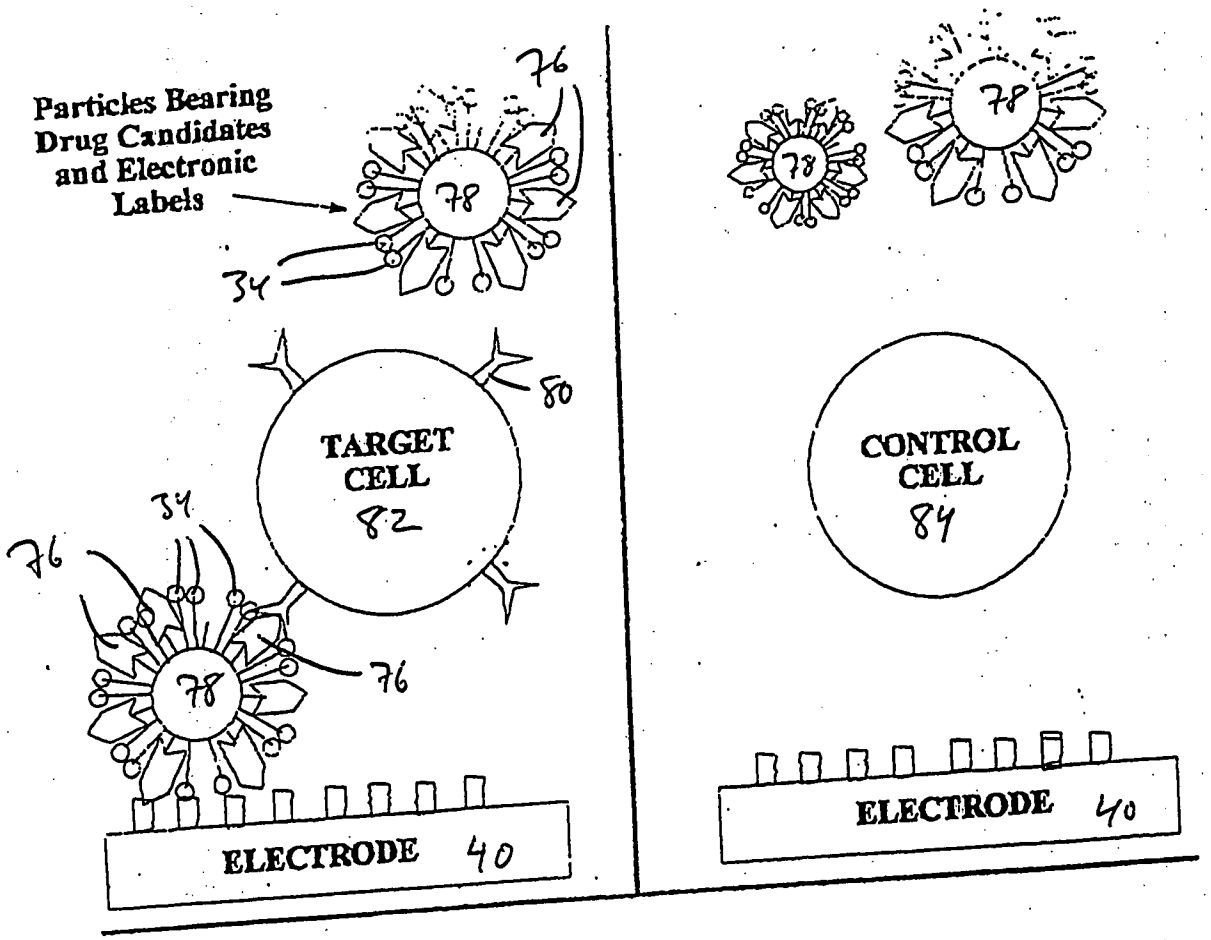


Figure 7

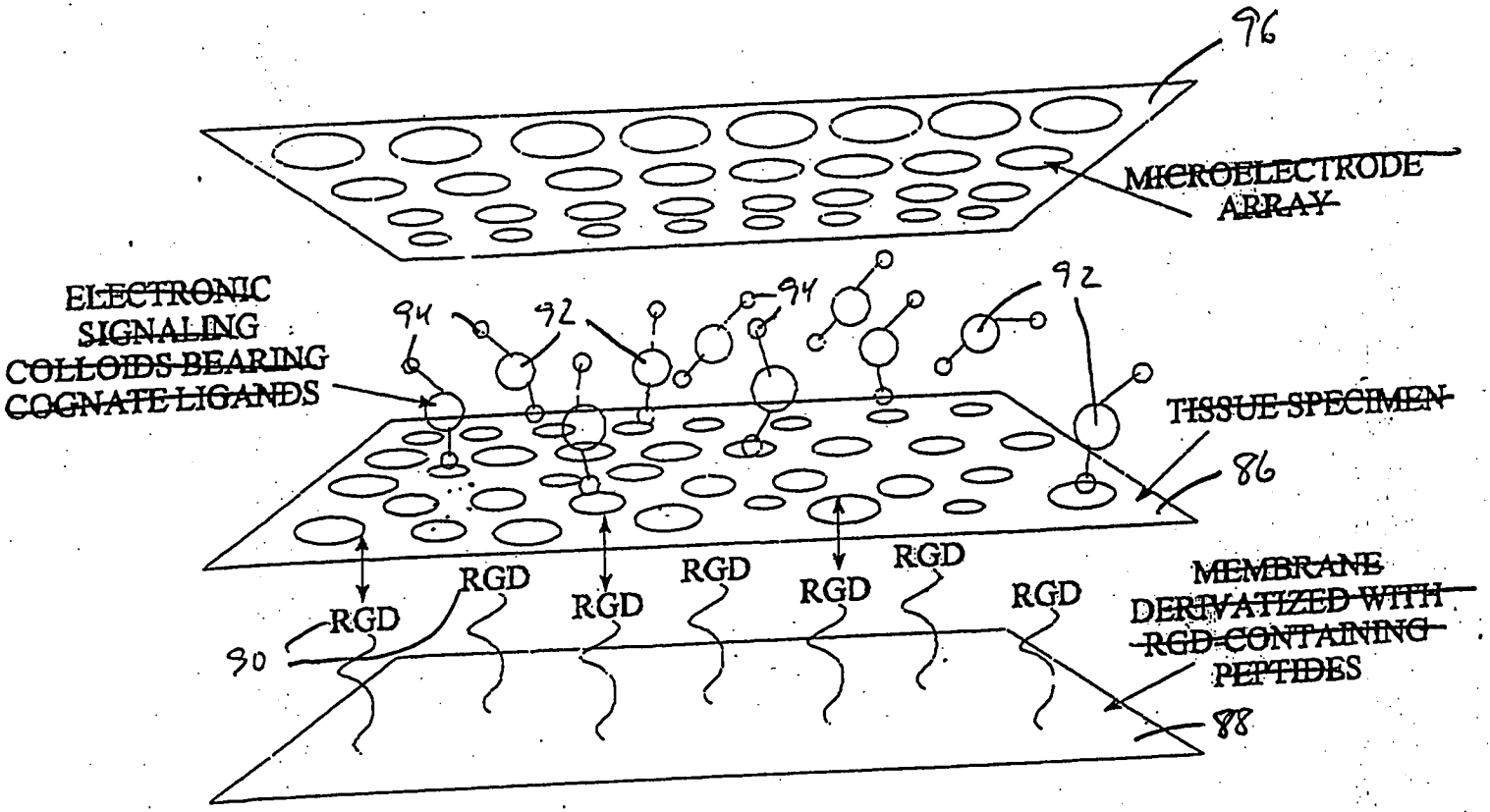


Figure 8

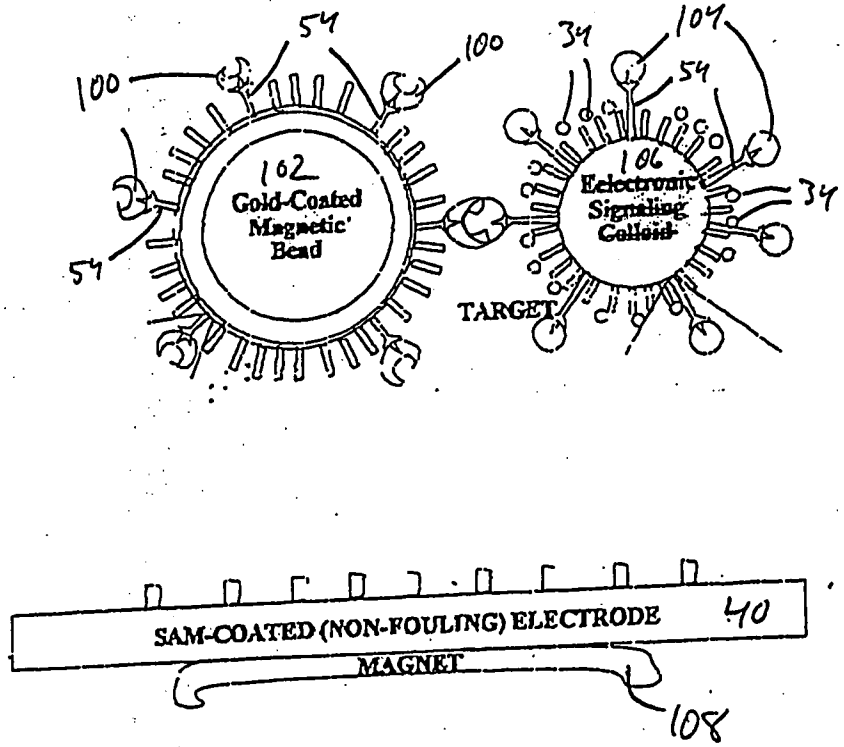


Figure 9

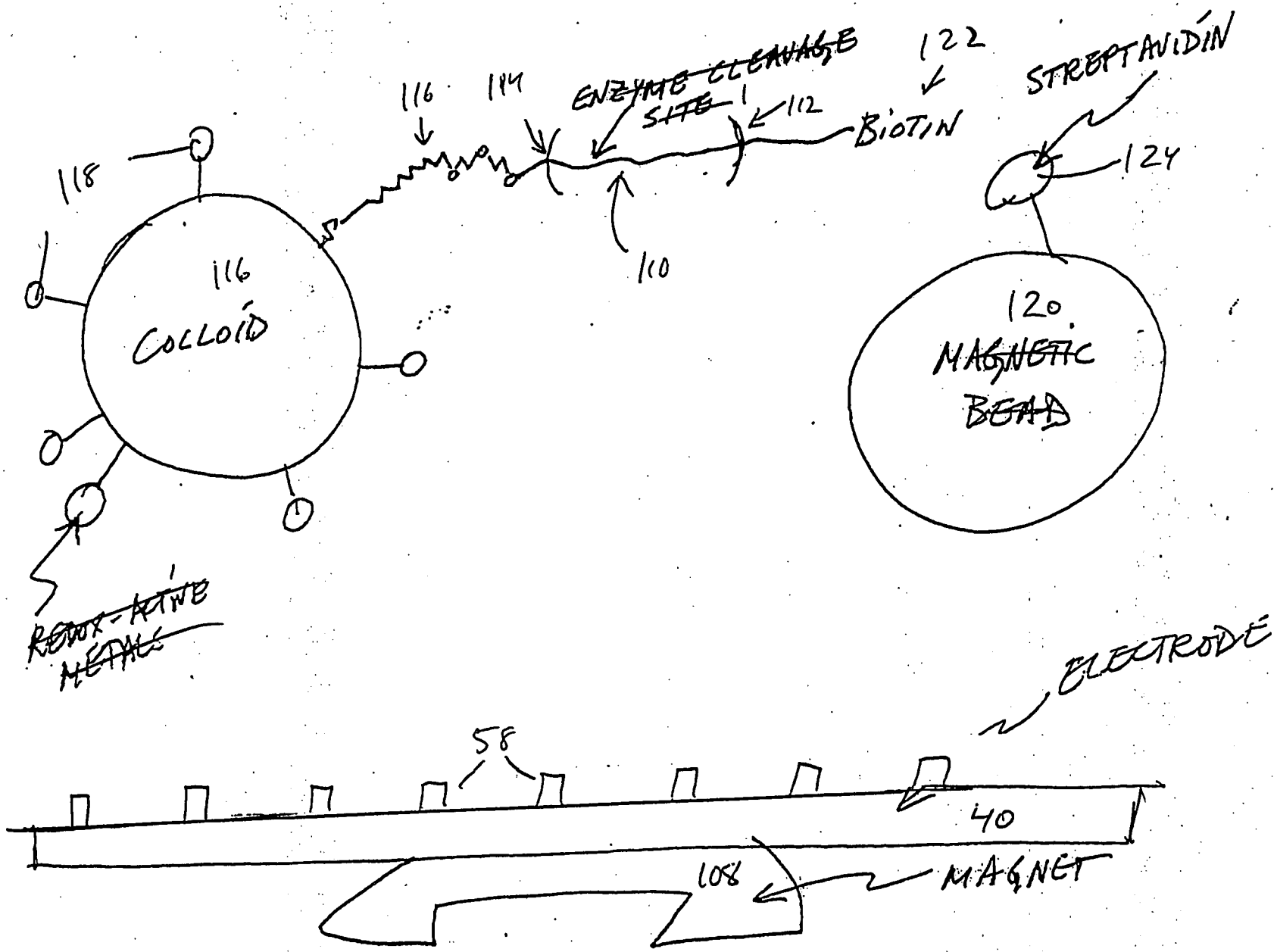
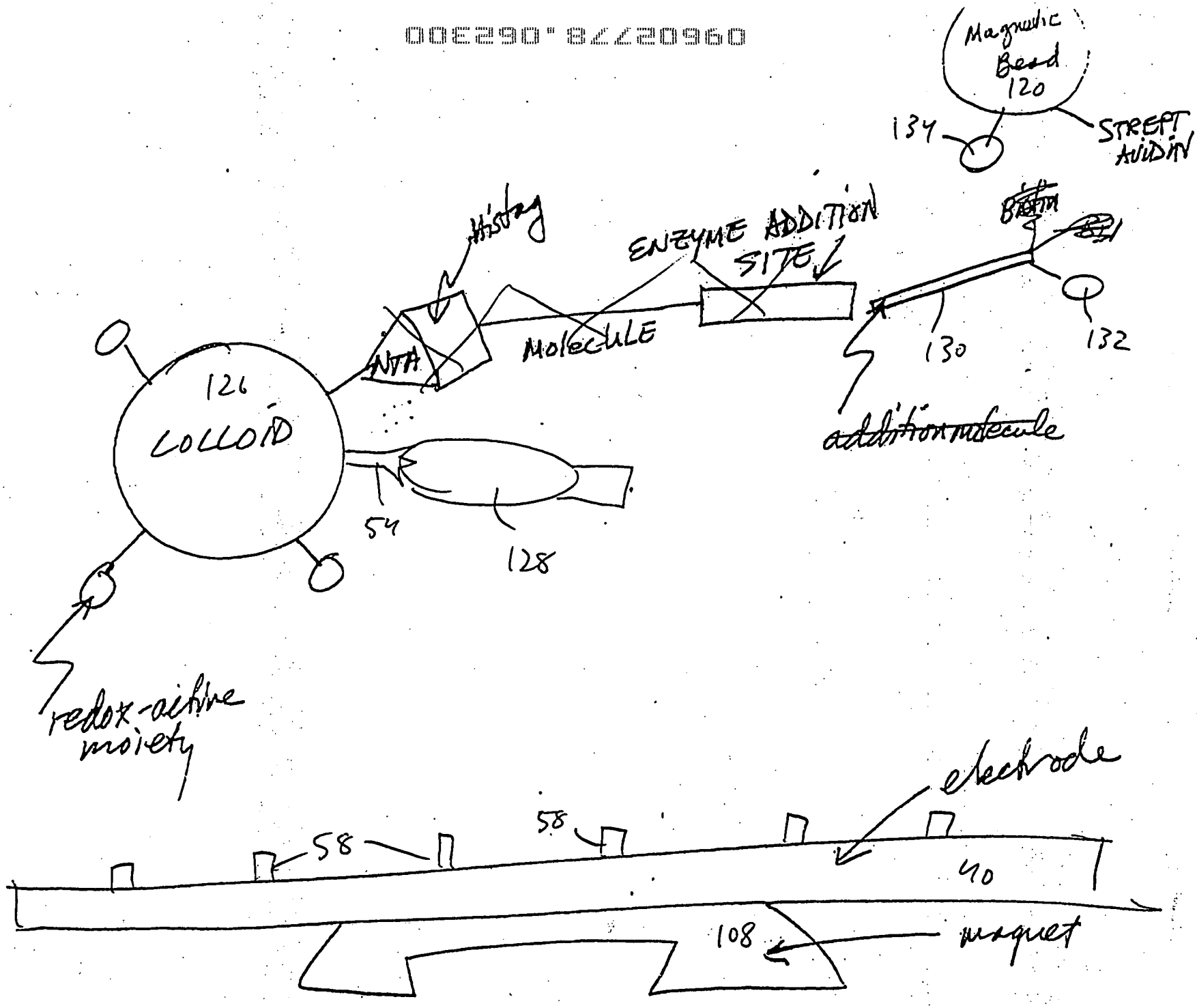

116
114
ENZYME CLEAVAGE SITE
112
122
BIOTIN
STREPTAVIDIN
124
118
116
COLLOID
110
120
MAGNETIC BEAD
REDOX-ACTIVE METAL
ELECTRODE
58
40
108
MAGNET

Figure 10



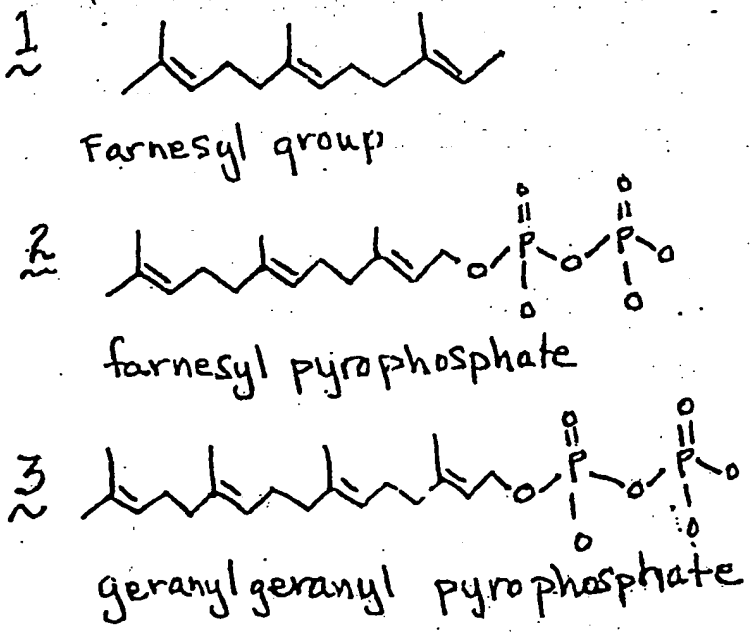
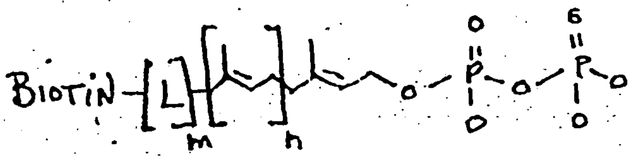

1
Farnesyl group
2
farnesyl pyrophosphate
3
geranyl geranyl pyrophosphate

Figure 12

a)

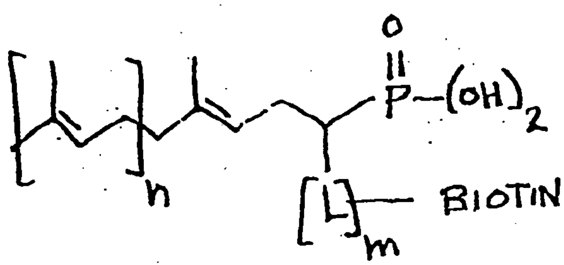


n=0-10

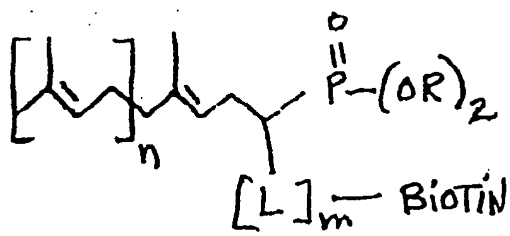
L= Linker

m= 0-10

b)



c)



d)

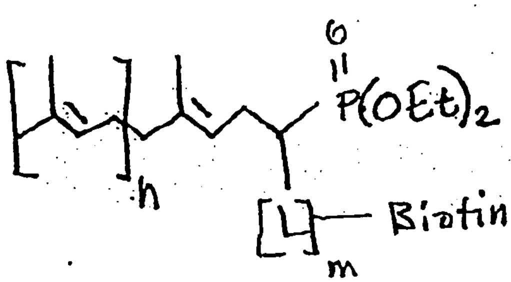


Figure 13

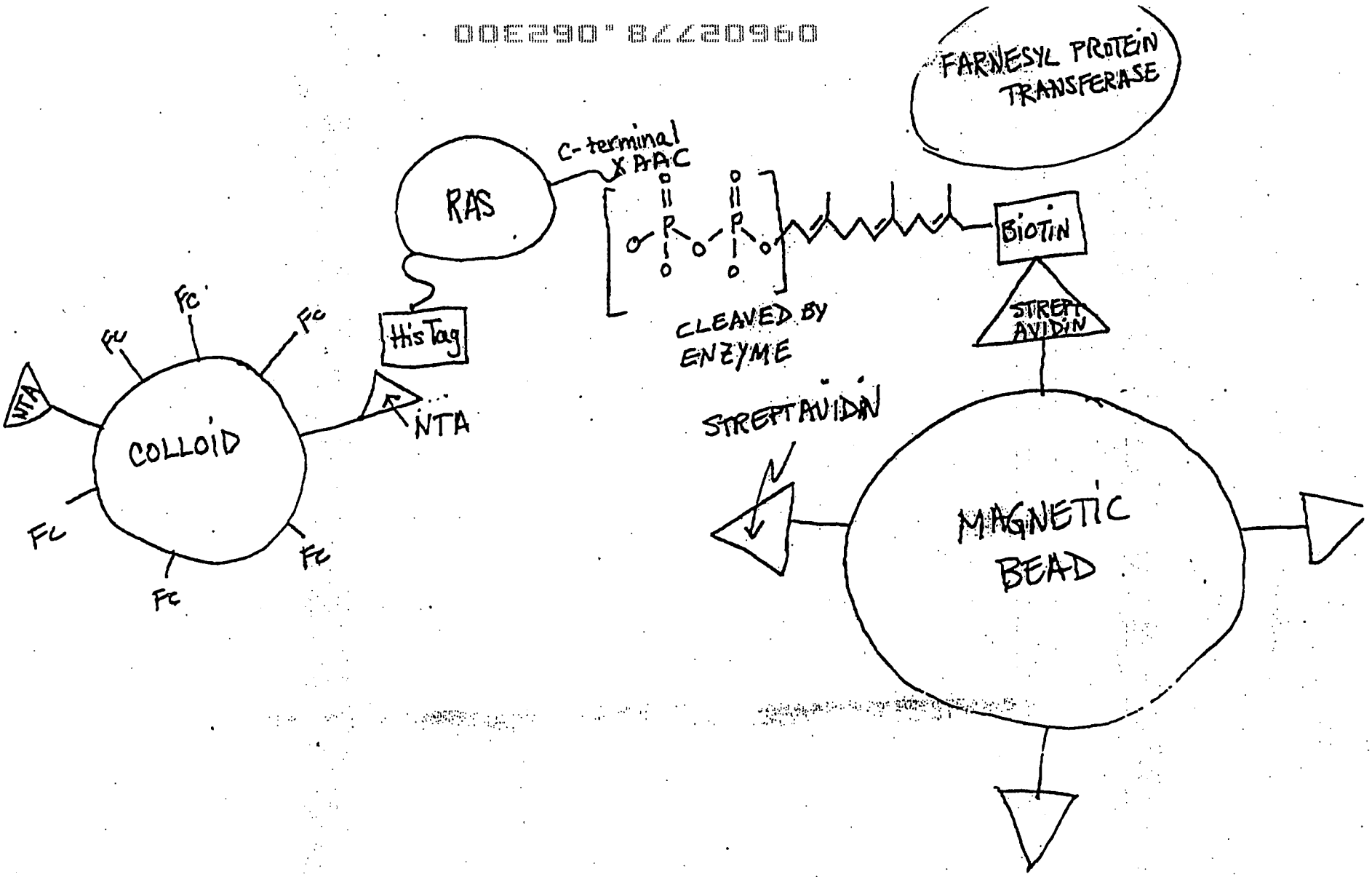
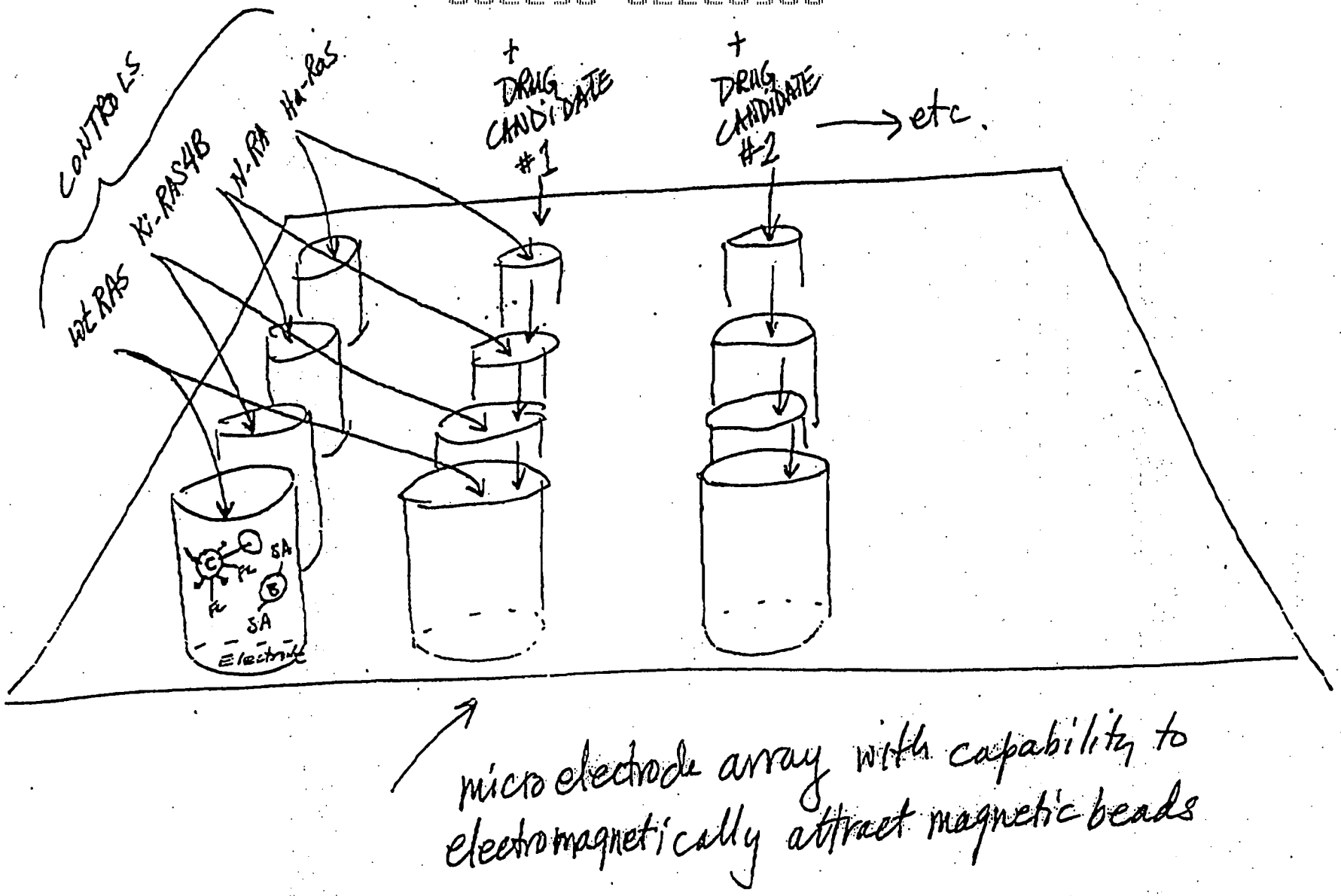


Figure 14



microelectrode array with capability to electromagnetically attract magnetic beads

Figure 15

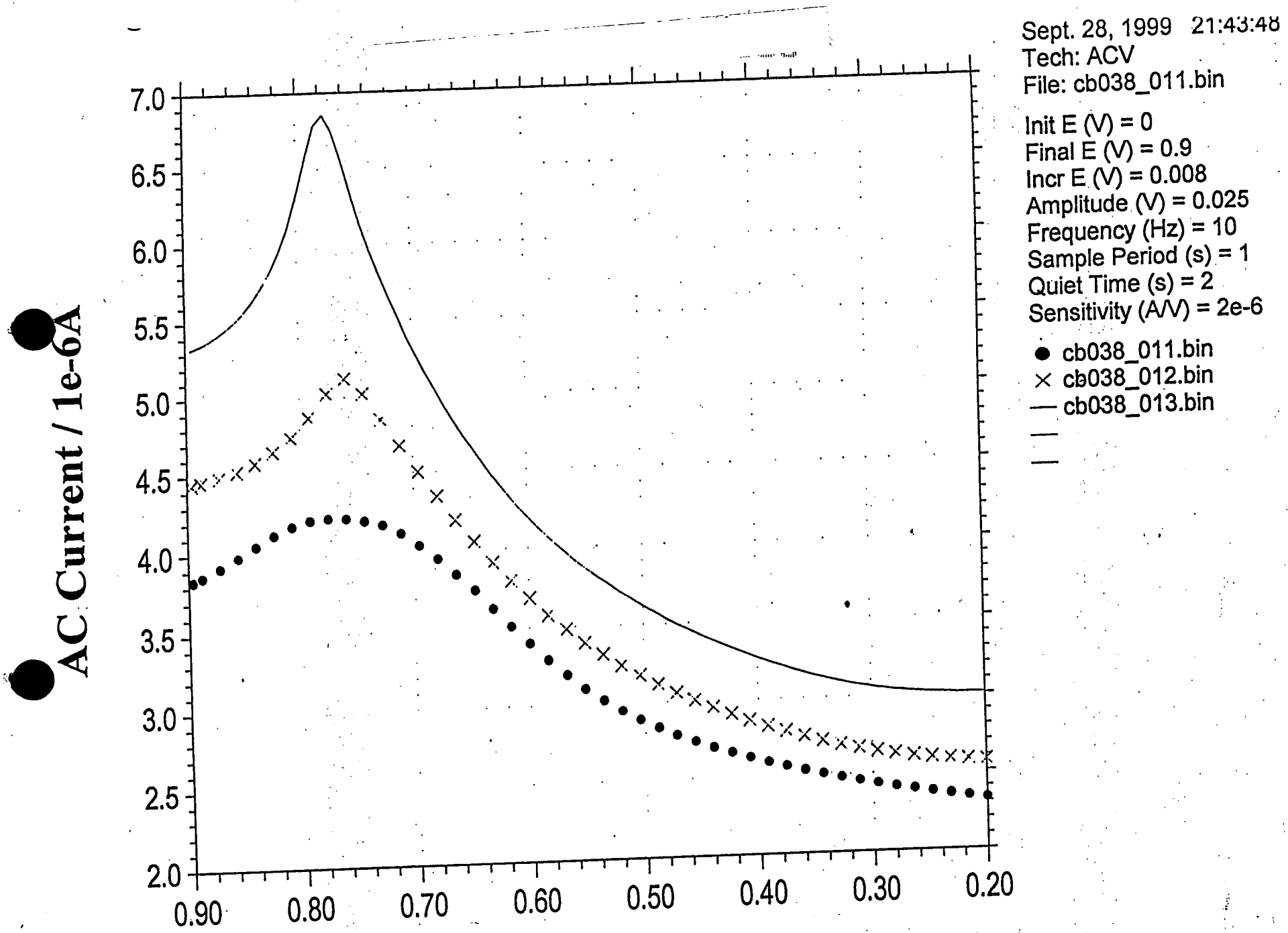


Fig.16

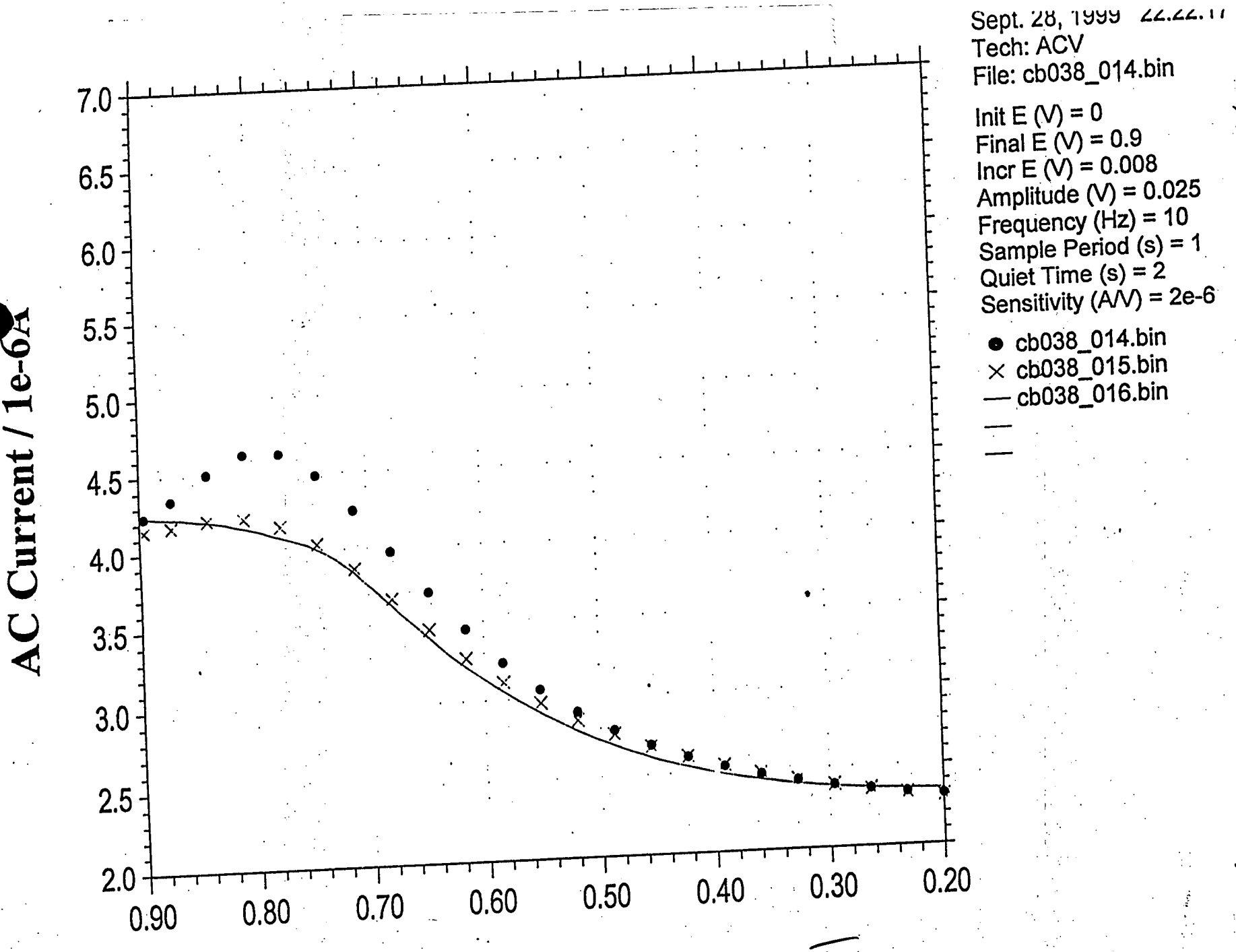


Fig 17

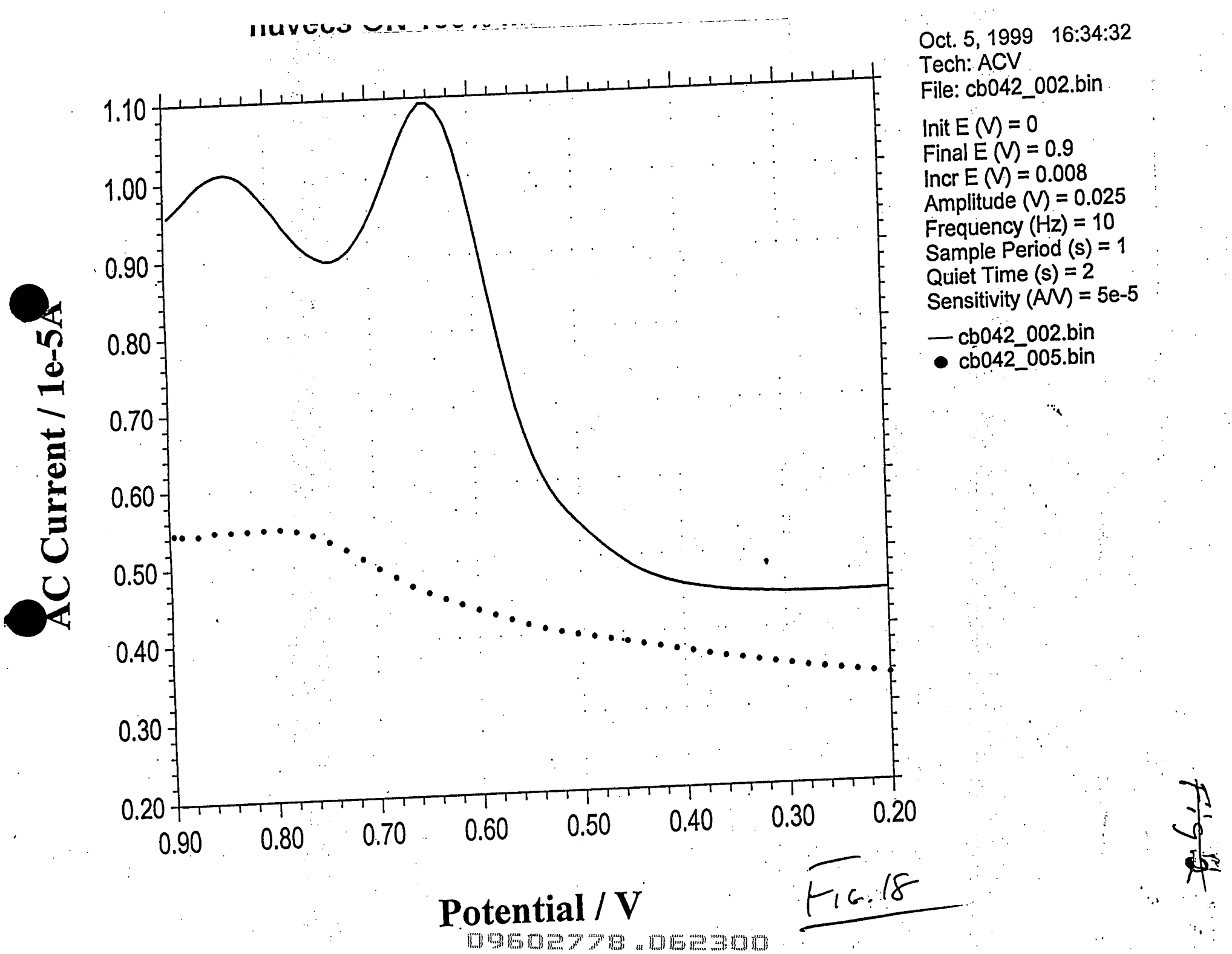


Fig. 18

HUVECs on electrodes coated with 25% #7 +/- RGD peptide

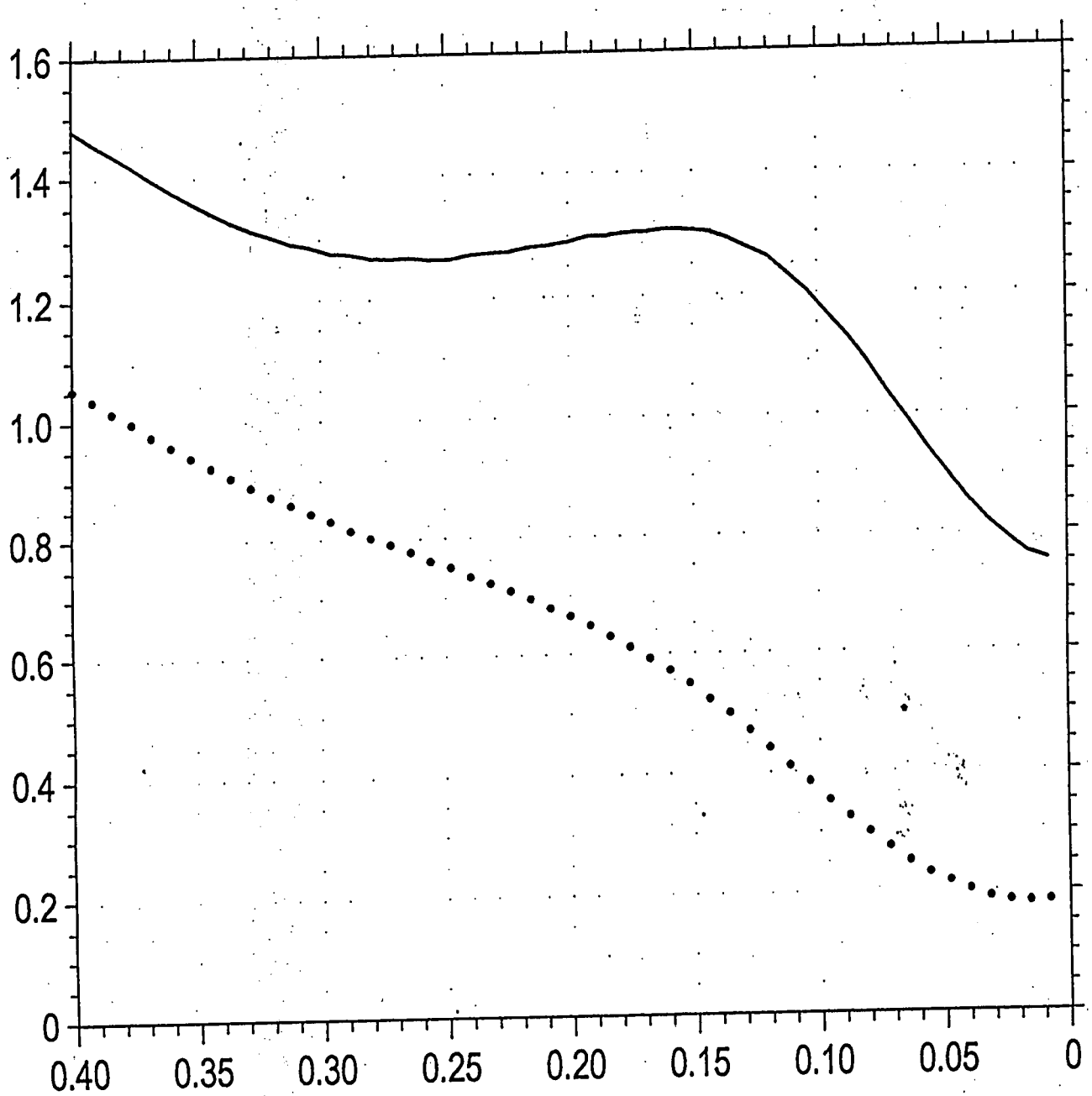


FIG. 19

FIG. 3

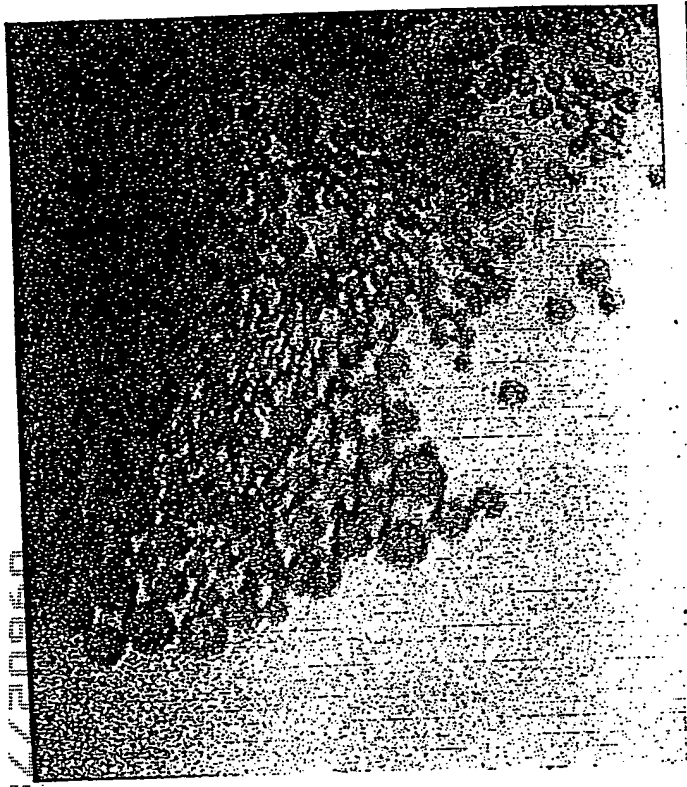


FIG 20

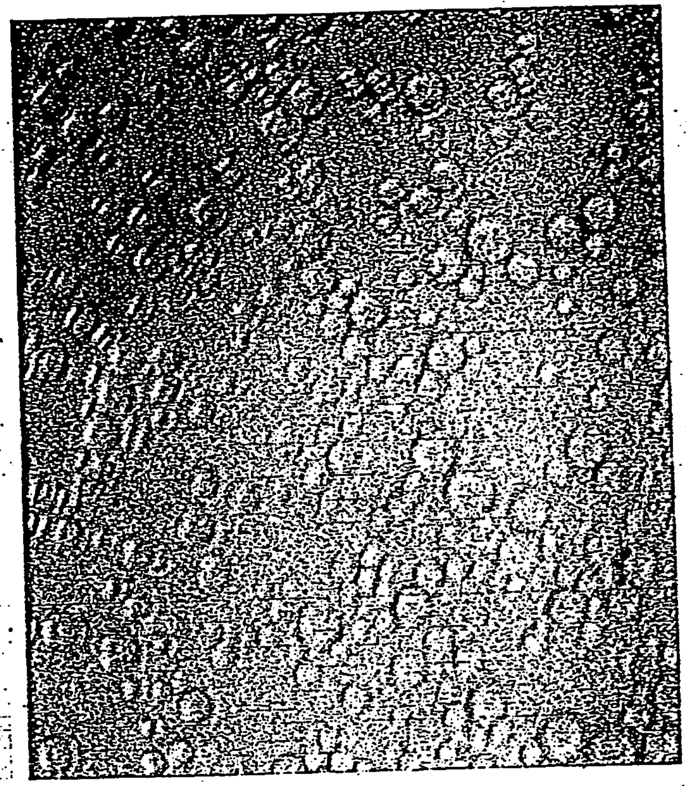


FIG 21

Fig 4

0	0	0
25	34	8
50	12	57
65	107	98
80	220	194

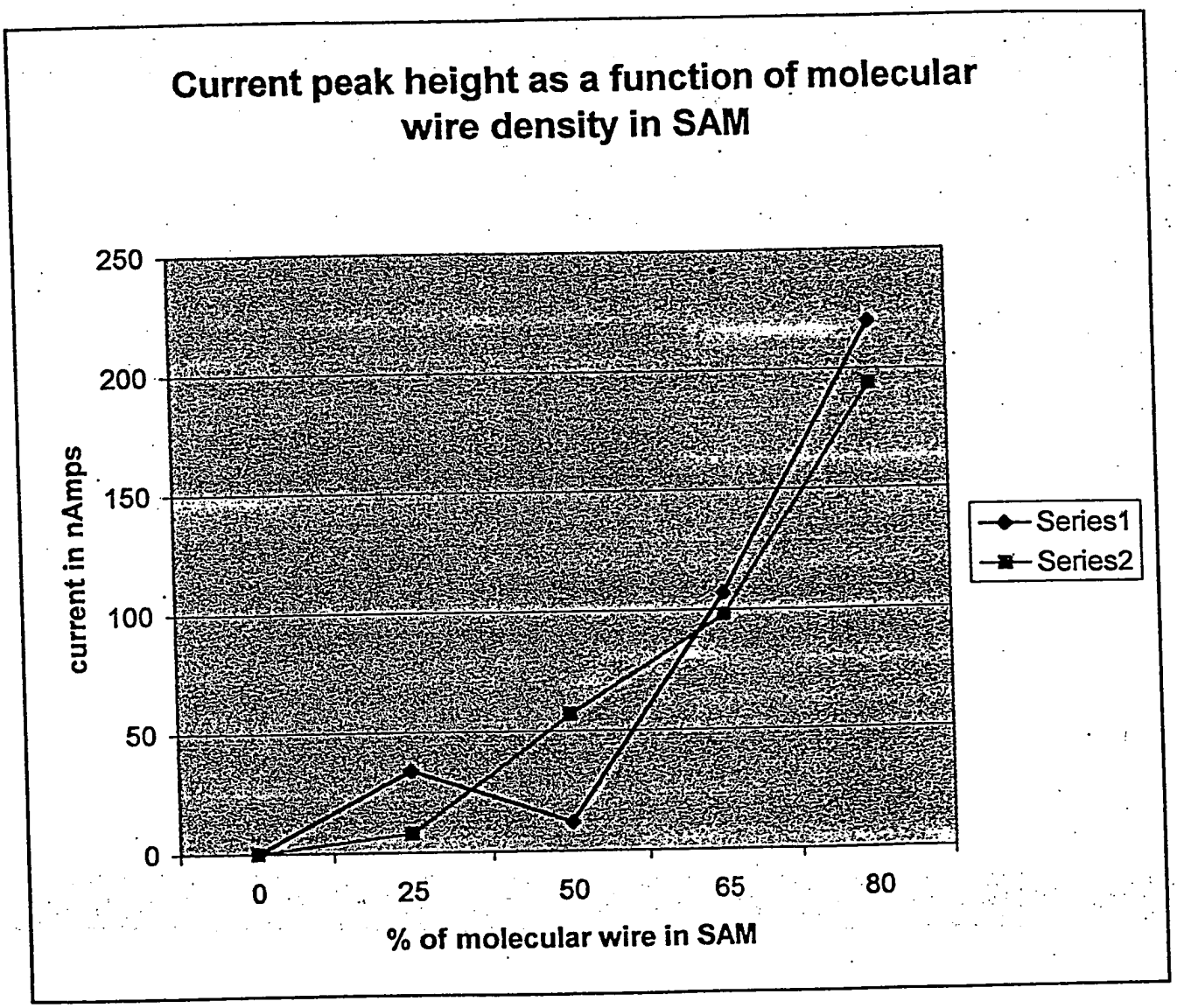


FIG. 22

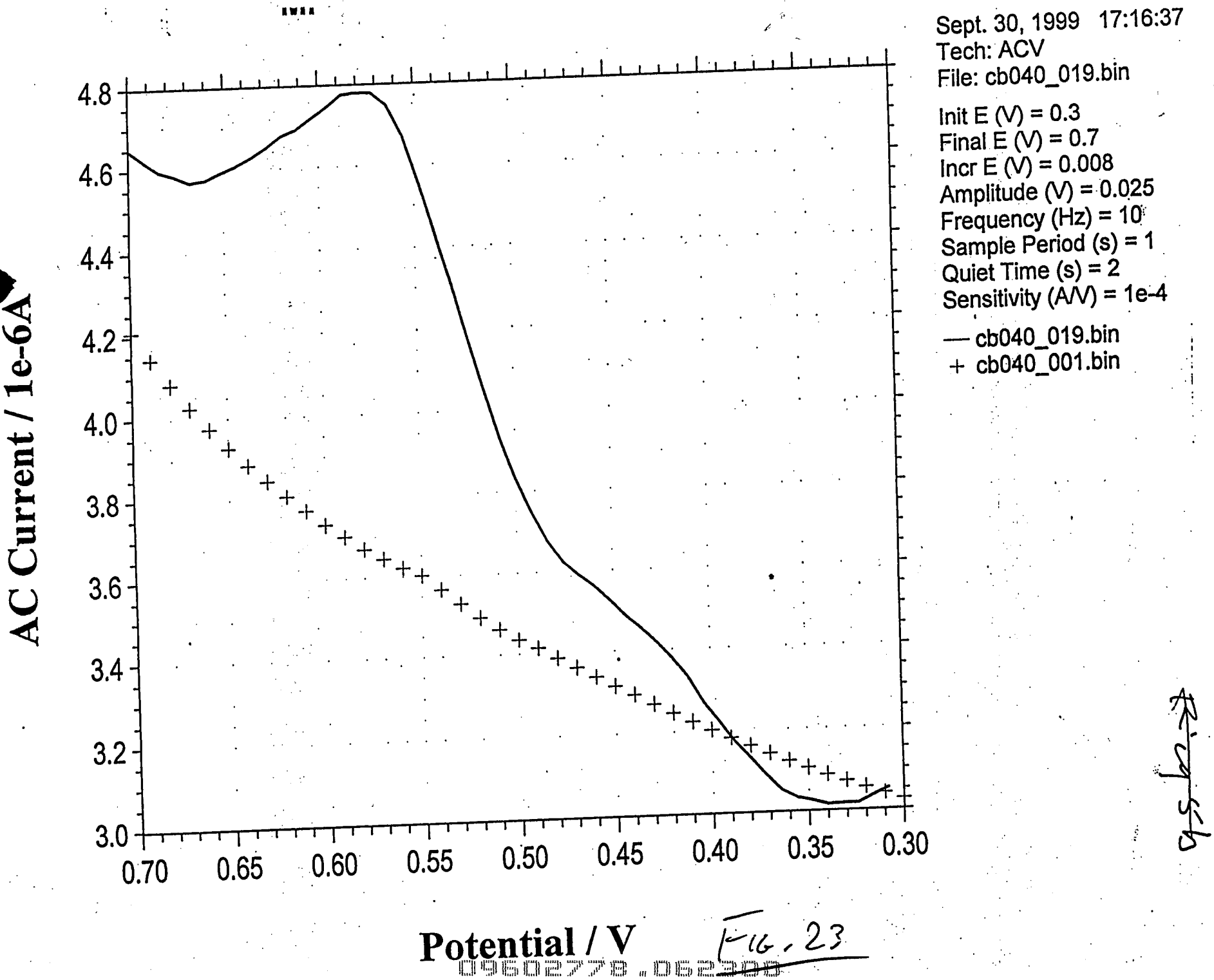


Fig. 23

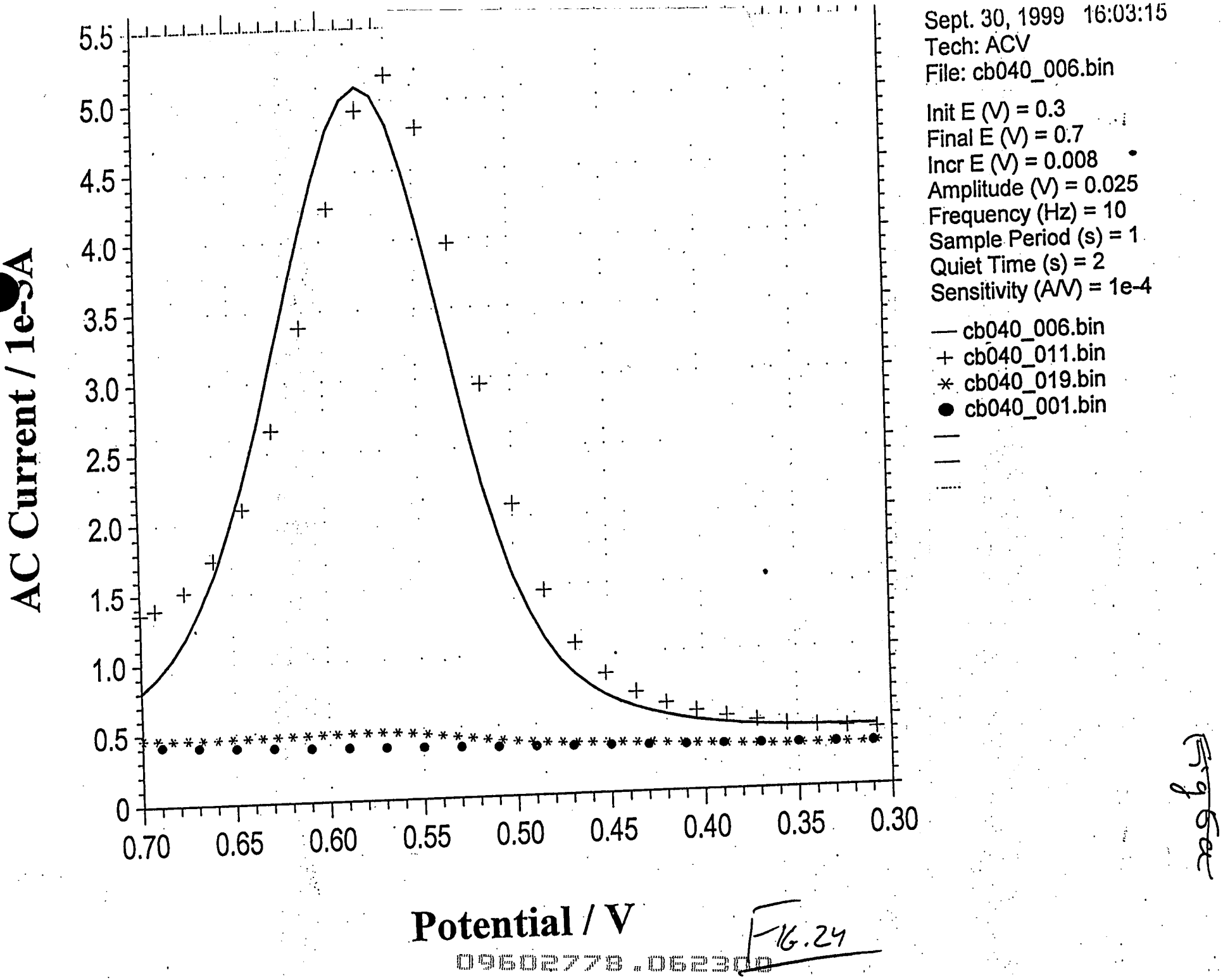


FIG. 24

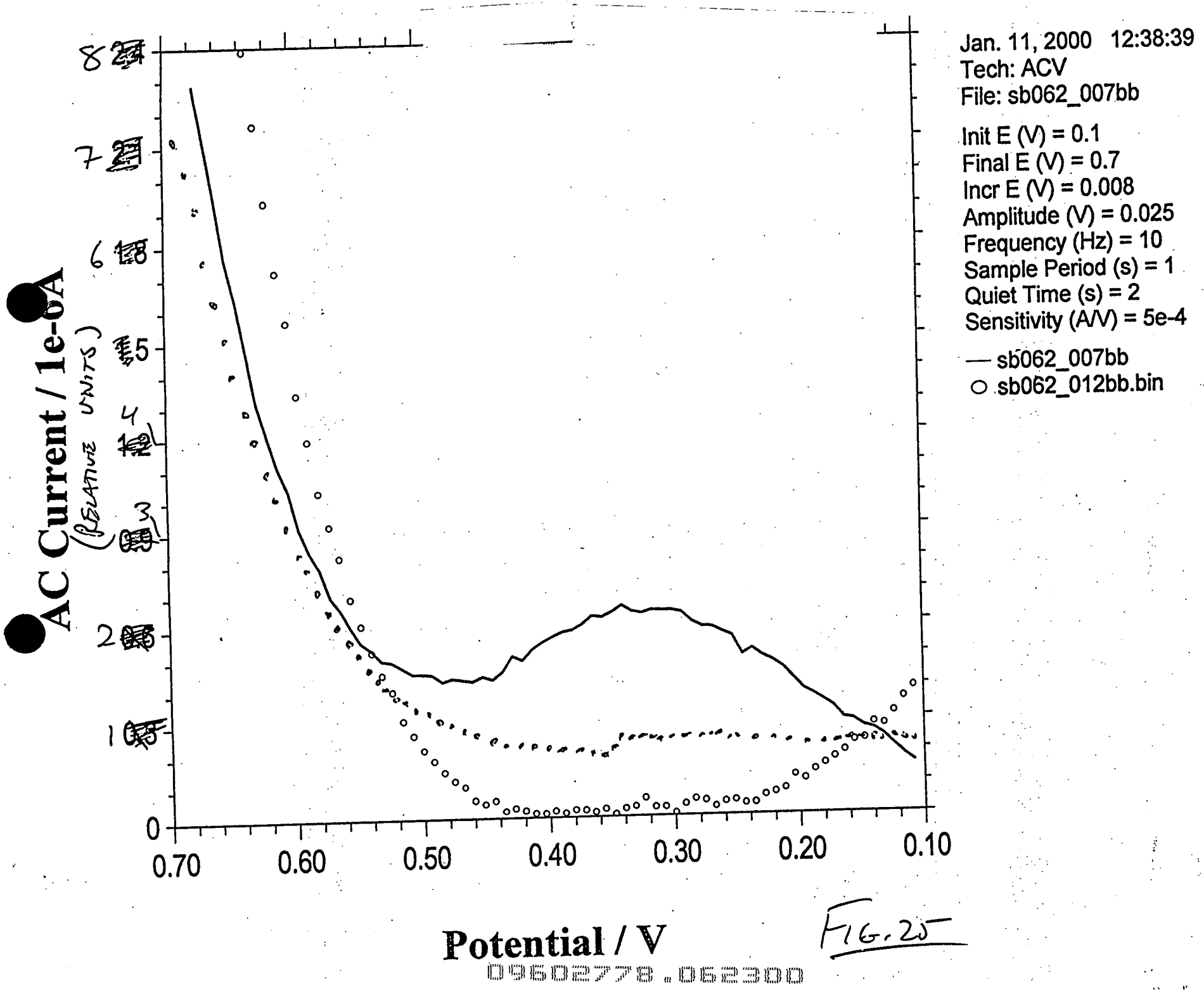


FIG. 25

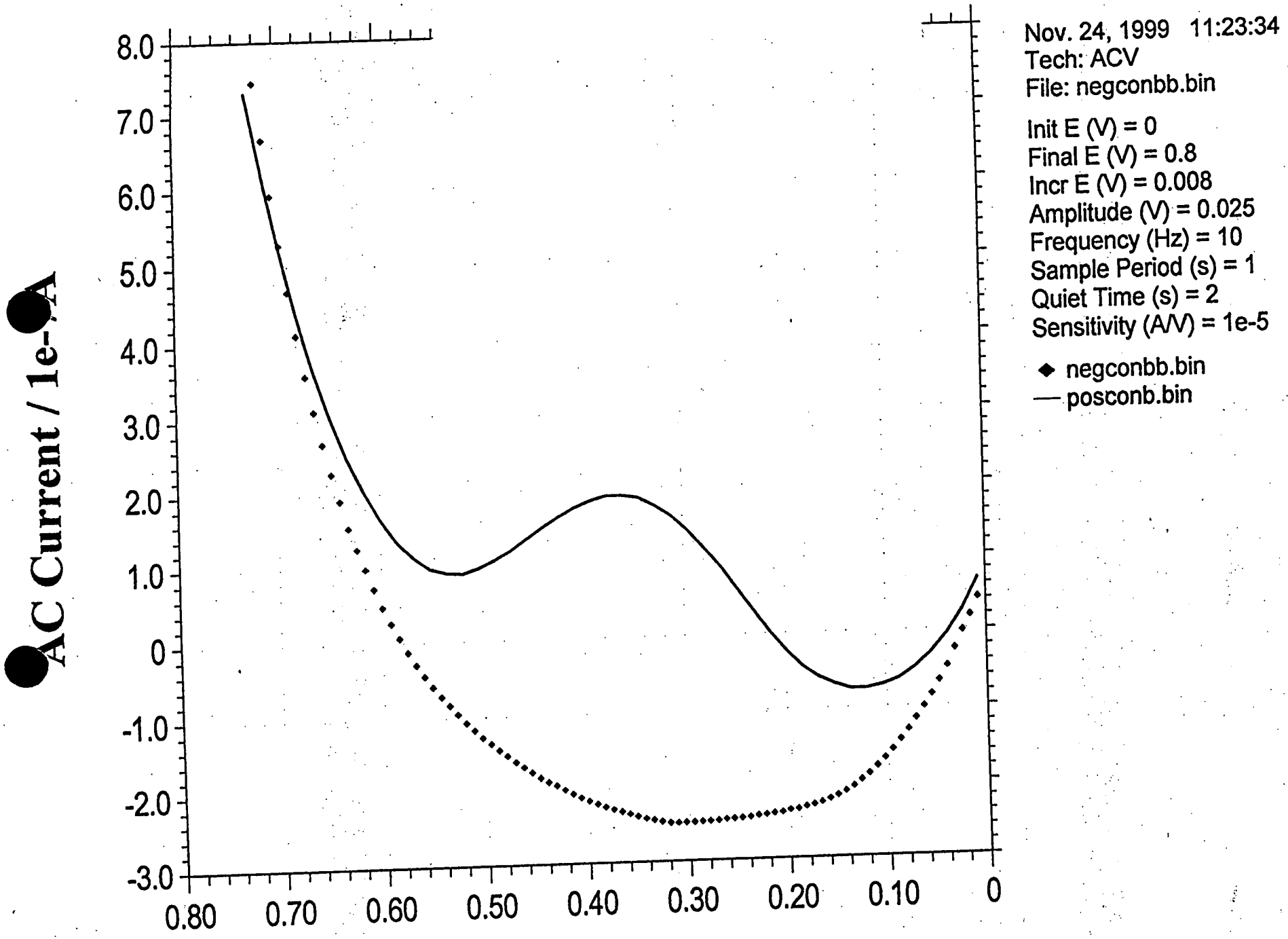


FIG. 26

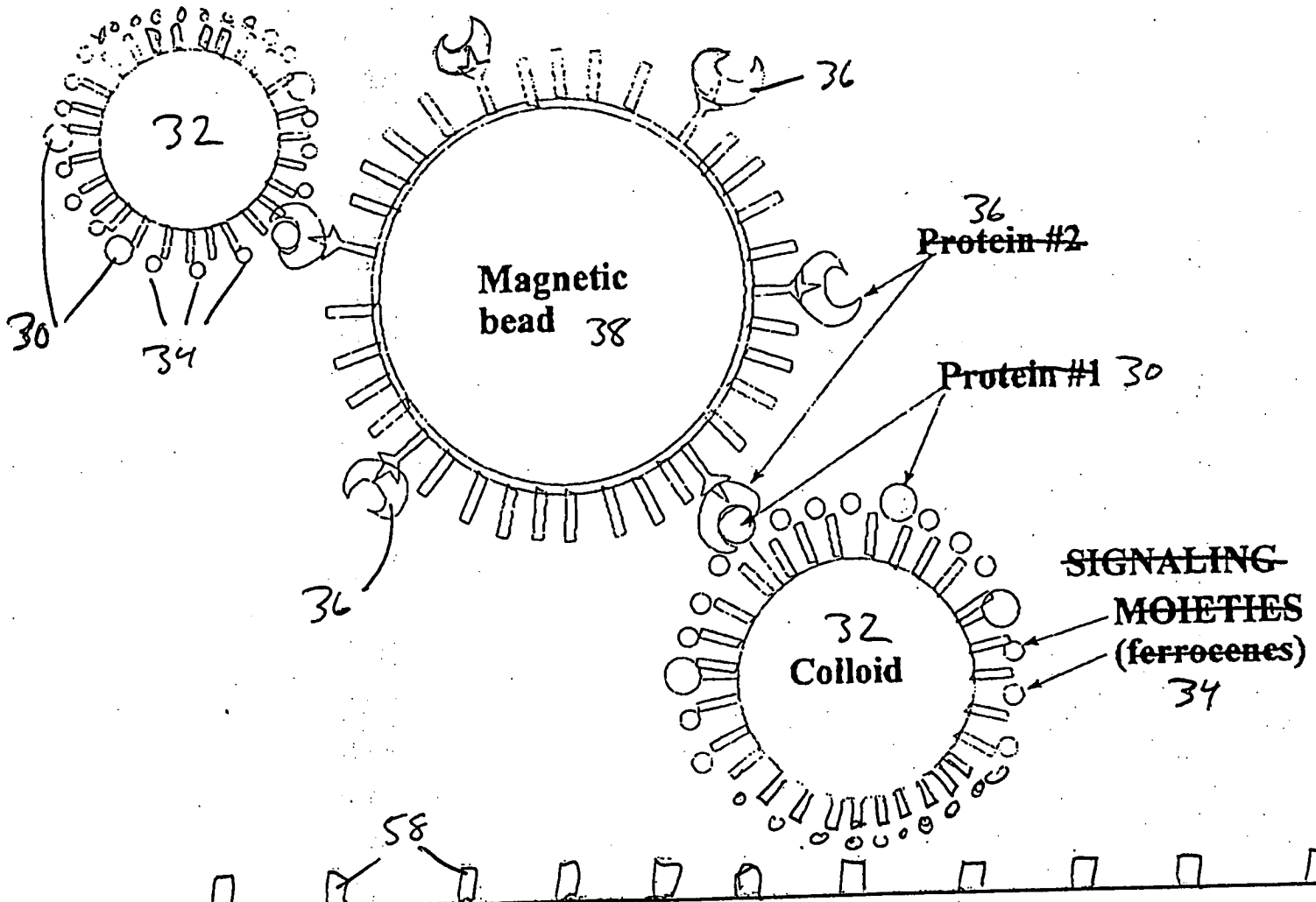


Fig. 27

Proteins in close proximity

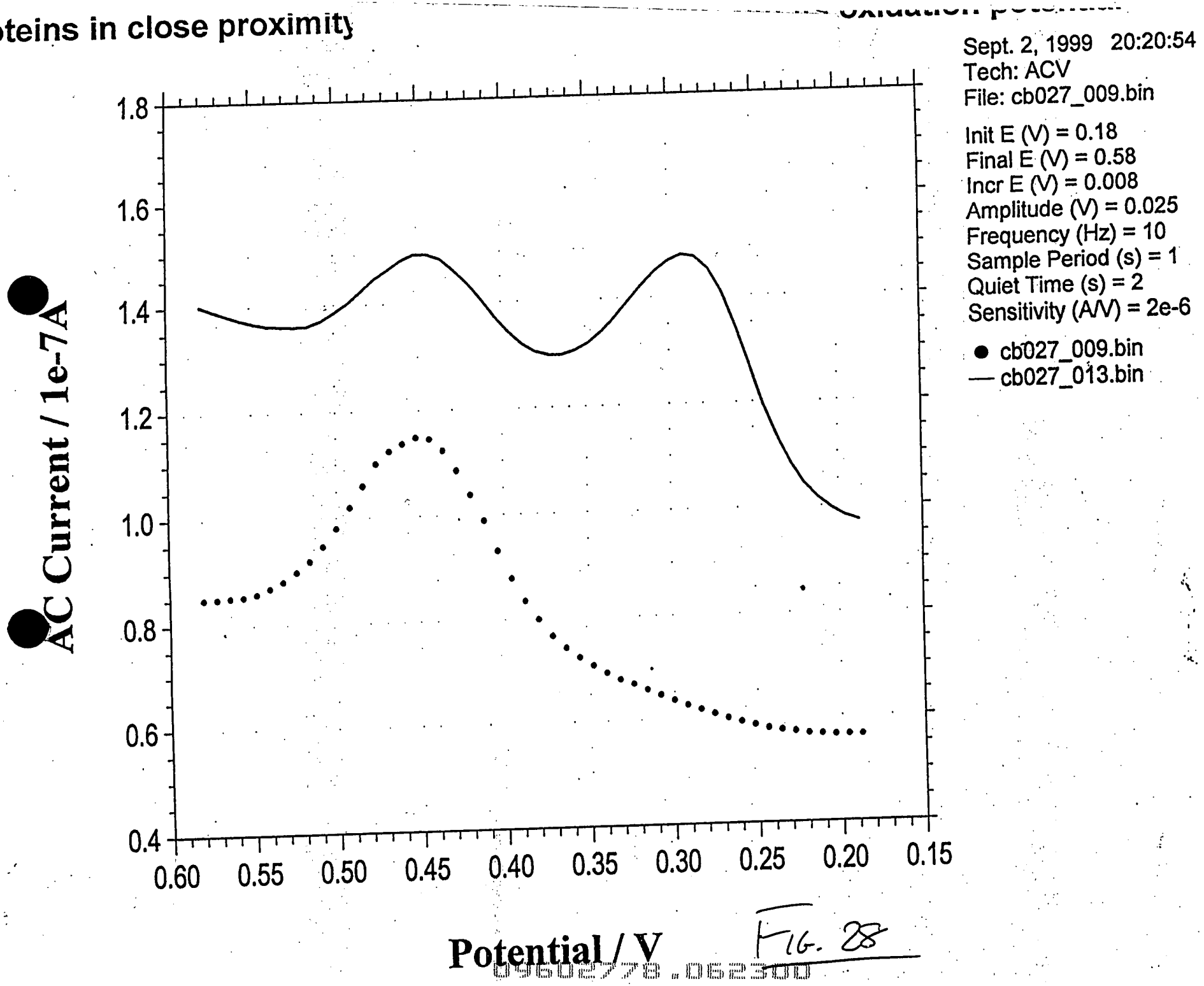


FIG. 28

FIG. 29A

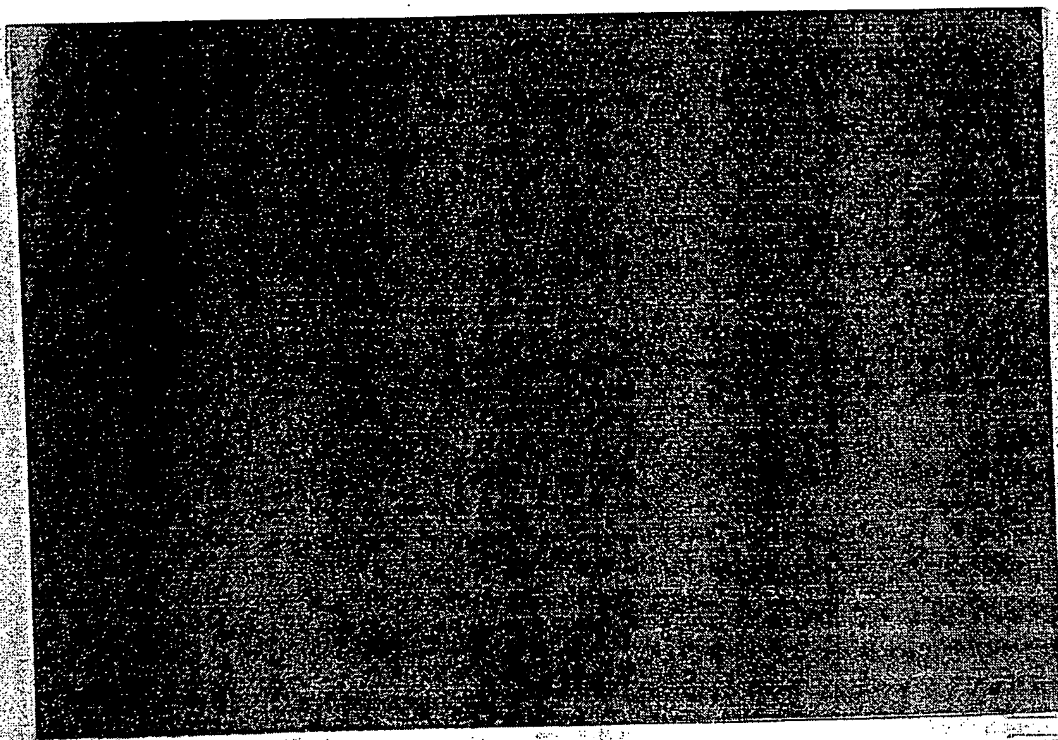
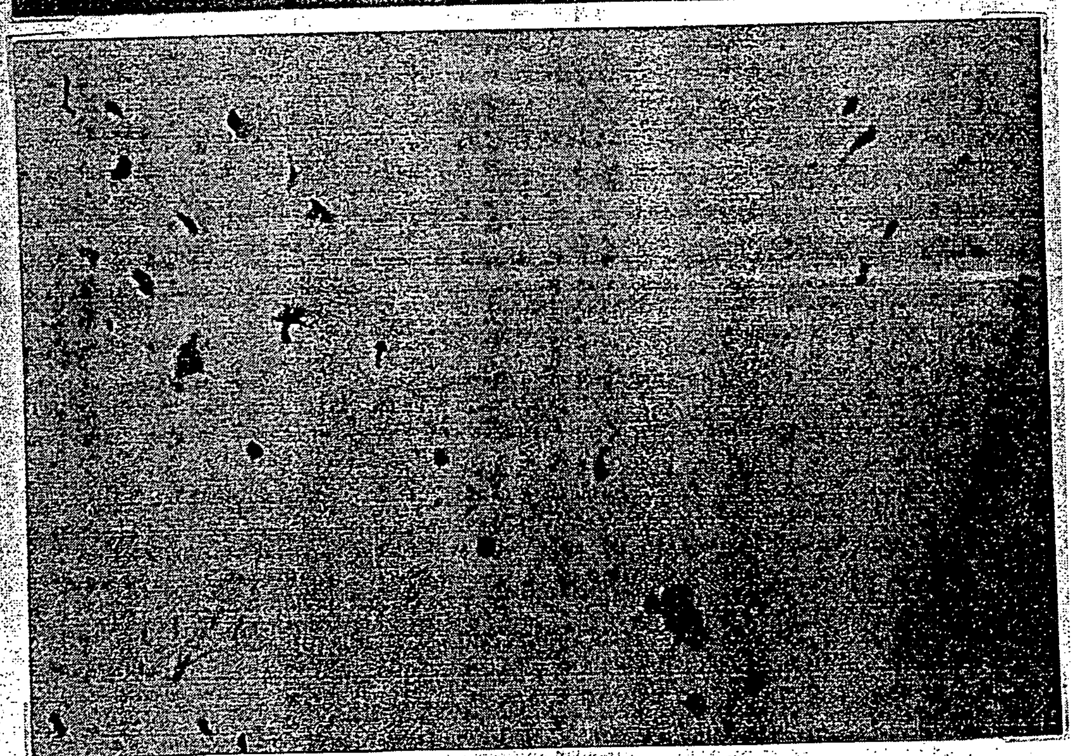


FIG. 29B



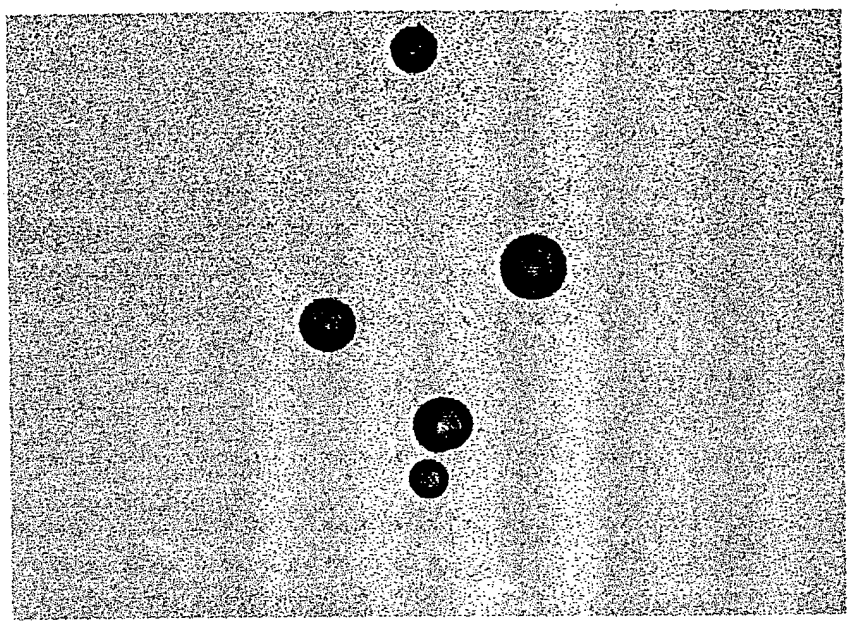


FIG 30A

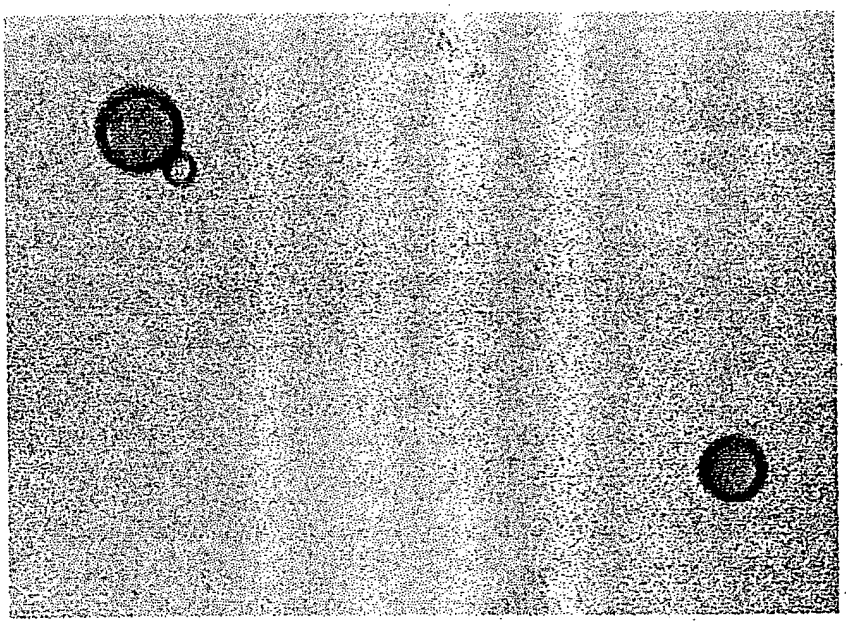


FIG 30B

Colloid Modified ELISA Yields a Million-Fold Increase in Sensitivity

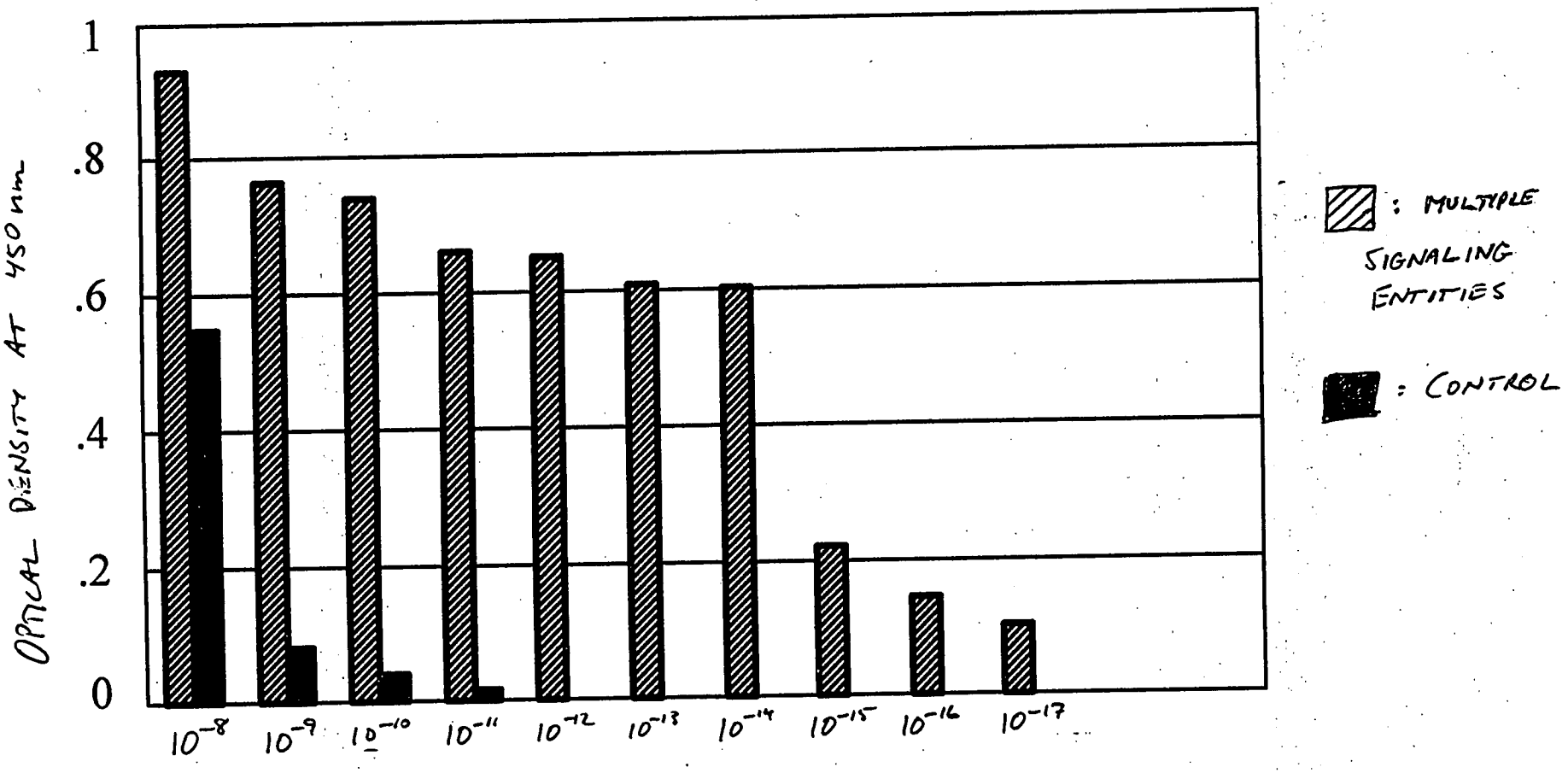


Fig. 31

25% MHT chip with GSH-colloids